

**B103** The Calling Behavior and Call Variation of the Frog *Rana temporaria dybowskii*.

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A detailed study was made of natural calling behavior of *Rana temporaria dybowskii* in Cheongwon from 1997 to 1998. The calls of *R. temporaria dybowskii* were classified to three types by their behavior accompanied. A type call is used to advertise frogs locations. B type call is emitted when frogs detect or fight with intruders. When a male frog is clasped by another male, clasped male calls C type call till being released.

A type call of *R. temporaria dybowskii* was composed by 5-7 pulses with distinct intervals. The dominant frequency of A type call was 1359.11Hz(SD=±205.23), and call duration is 517.99ms(SD=±139.79). A type call was influenced by water temperature and the snout-vent length of calling males. As water temperature increased, call duration decreased while dominant frequency increased. As snout-vent length of calling male increased, dominant frequency decreased while call duration and number of pulses increased.

**B104** Some factors affecting breeding success in the Great Reed Warbler (*Acrocephalus arundinaceus orientalis*).

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Some factors affecting breeding success in the Great Reed Warbler (*Acrocephalus arundinaceus orientalis*) were examined during the breeding season of 1998. The rate of hatching and fledgling success were 79.8% and 62.5%, respectively. The hatching success was higher in the clutches laid earlier than in ones laid later(Mann whitney U-test, p=0.014), but the breeding success was not different. The breeding success of monogamous birds was higher than that of polygynous ones(Mann whitney U-test, p=0.039). In polygynous nests, no difference in breeding success was found between primary and secondary nests. Breeding failure occurred mainly before hatching. The main factor affecting breeding success during raising period was weather(72.2%).